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09/642,203	08/19/2000	Donald E. Gillespie	1752/USW1752PUS	6852

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EXAMINER

D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

### Application No.

09/642,203

### Applicant(s)

GILLESPIE ET AL.

### Examiner

Stephen M. D'Agosta

### Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Response to Arguments***

Applicant's arguments, see after final amendment, filed 6-24-04, with respect to the rejection(s) of claim(s) 1-24 under USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the prior art for the old and new claims.

a. The examiner used Dougherty to reject the "WSLR" recitation. Dougherty can be removed since a WSLR is similar to a "SLR within an MSC", ie. an HLR or VLR, which is well known in the art. Hence, Dougherty can be removed:

"...In order to respond to subscriber call requests, the MSC 22 compares the information transmitted by the wireless handset 24 with subscriber data contained in a database, referred to as a Wireless Subscriber Location Register 30. The WSLR 30 is a master database for storing data related to each mobile subscriber, such as the subscriber profile and mobility information together with their relevant permanent (static) data, such as access capabilities and subscriber services. WSLR 30 also contains location and service data for each visiting subscriber entering its coverage area in order to route incoming and outgoing calls appropriately. The WSLR 30 performs substantially the same functionality as the well known Home Location Register and Wireless Service Control Point, yet serves one or more MSCs 22 rather than only one MSC 22, as traditionally done in the prior art..." (C2, L50-65).

b. Further to point "a" above, the applicant also claims, in the specification of this case, that a WSLR can also perform SCP operations (see claims 3 and 24).

c. The applicant argues that "wherein applying service logic to disconnect the call or route the call to the at least one alternative system comprises examining a source of the call and processing the call accordingly" is not taught. The examiner disagrees since Hallenstal teaches automatic call forwarding which requires the system to determine who is calling and process the call according to the user's routing preference(s).

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3, 11-13 and 21-24 and claims 24-25** rejected under 35 U.S.C. 103(a) as being unpatentable over Hallenstal US 6,125,126 and further in view of Widmark et al. US 5,504,804 (hereafter Hallenstal and Widmark).

As per **claims 1, 12 and 21 and 24**, Hallenstal teaches for use in a communication network (figures 1 and 6) including a switching center in communication with at least one alternative system, an Intelligent Peripheral (figure 1, #16) and a plurality of subscribers (figure 1, letters A, B and C) each having at least one Directory Number (C2, L28-35) and a method for conditionally forwarding a call (abstract) comprising a Service Location Register (ie. HLR, VLR, WSLR per applicant's spec) the call termination parameters including call forwarding features (C4, L10-45), detecting busy or no answer (C2, L48-51, C5, L14-16) forwarding a request to SLR for routing instructions (C4, L54-67, C5, L1-13), applying service logic to forward call to DID of a resource on the IP (C2, L28-51, C4, L41-54) and applying service logic to disconnect the call or route the call to the at least one alternative system (C2, L52-67 and C3, L1-33) **but is silent on** the SLR in communication with switching center and SLR operative to retrieve stored call termination parameters for each DN and call information for each incoming call to a DN and wherein applying service logic to disconnect the call or route the call to the at least one alternative system comprises examining a source of the call and processing the call accordingly.

The examiner notes that Hallenstal teaches a mobile network (figure 1, #18) which inherently include MSC's and HLR/VLR/WLSR's and the abstract teaches call processing/forwarding of a call.

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Widmark teaches a mobile network that applies call routing decisions (abstract) whereby the MSC requests information from the HLR (eg. connection and data flow) and the MSC/HLR can store/send status information about the call(s). The examiner notes that an HLR may be co-located with an MSC and even be part of the actual MSC. Widmark also teaches determining who the calling party is and routing/forwarding based on if they are of a particular category which reads on "applying service logic to disconnect the call or route the call to the at least one alternative system comprises examining a source of the call and processing the call accordingly" (C6, L37-43)

***With further regard to claim 12***, Hallenstal is **silent** on a WSLR. The applicant states in the specification that a WSLR is a wireless SCP and these are widely used in telephone systems as is known in the art. The examiner interprets a WLSR as being either a HLR or VLR which are well known in the art to store data about each mobile user (eg. profile data).

It would have been obvious to one skilled in the art at the time of the invention to modify Hallenstal, such that the SLR and MSC interact to transmit/receive call information, to provide means for the system and user to understand all status data about said forwarded call.

As per **claims 2, 13 and 22**, Hallenstal teaches an MSC (figure 1, #18 – cell systems inherently contain MSC's).

As per **claims 3 and 24**, Hallenstal teaches claim 1/21 **but is silent on** a WSLR.

The applicant points out that a WLSR is the same as an SCP, which is known in the art as being used in phone networks (provides supplemental software programs for service logic).

The examiner interprets the MSC as containing a WLSR (ie. HLR or VLR which are well known in the art).

It would have been obvious to one skilled in the art at the time of the invention to modify Hallenstal, such that a WSLR is used, to provide means for a WSLR to be used in place of an SCP (as are known to be used in telephone systems).

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As per **claim 11 and 24**, Hallenstal teaches at least one alternate system comprises a Voice Mail system (C4, L34-38).

As per claim 25, Hallenstal teaches the method of claim 25, further comprising:  
receiving a call directed to the mobile directory number of the subscriber;  
receiving either a busy or a no-answer indication from the mobile device of the  
subscriber relating to the mobile directory number, and  
processing the call to the mobile directory number by transferring the call to a  
voice mail system of the subscriber (figure 10 shows routing/forwarding a call to either a  
number or voicemail).

**Claims 4-10 and 14-20** rejected under 35 U.S.C. 103(a) as being unpatentable over Hallenstal/Widemark and further in view of Brennan et al. US 5,329,578 (hereafter Brennan).

As per **claims 4 and 14**, Hallenstal teaches claim 1/12 **but is silent on** wherein the step of applying service logic includes determining based on the calling party DN if the call is a business or personal call.

Brennan teaches determination of business or personal call (abstract, C1, L39-51 and C6, L5-30).

It would have been obvious to one skilled in the art at the time of the invention to modify Hallenstal, such that service logic is applied based on the type of call, to provide means for special call handling based on business or personal calls.

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As per **claims 5 and 15**, Hallenstal teaches claim 4/14 **but is silent on** the call if forwarded to a first alternative system is the call is business related and call is forwarded to second alternative system if personal.

Brennan teaches forwarding based on business or personal (abstract, C1, L39-51 and C4, L19-35 and C6, L5-30).

It would have been obvious to one skilled in the art at the time of the invention to modify Hallenstal, such that calls are routed to various systems based on personal or business calls, to provide means for the user to separate calls and send them to different systems.

As per **claims 6 and 16**, Hallenstal teaches claim 1/12 **but is silent on** applying service logic includes determining if the calling party directory number has been restricted.

Brennan teaches applying service logic if the calling number has been restricted, abstract, C1, L39-51, C3, L62-68, C4, L1-4, C4, L67-68 to C5, L1-59) and Alperovich teaches a similar embodiment (abstract – based on incorrectly forwarded number).

It would have been obvious to one skilled in the art at the time of the invention to modify Hallenstal, such that service logic determines if calling party number has been restrictions, to alert the user if a restricted caller has called.

As per **claims 7 and 17**, Hallenstal teaches claim 6/16 **but is silent on** wherein the call is forwarded to the at least one alternative system only if the calling party directory number is unrestricted.

Brennan teaches call forwarding if the calling party is unrestricted (abstract, C1, L39-51, C3, L62-68, C4, L1-4, C4, L67-68 to C5, L1-59).

It would have been obvious to one skilled in the art at the time of the invention to modify Hallenstal, such that the call is forwarded to an alternate system if unrestricted, to provide means to allow unrestricted calls to be routed to an alternate system (eg. to leave a voice mail message).

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As per claims **8-10 and 18-20**, Hallenstal is silent on determination of time of day, day of week and date of call.

Brennan teaches service logic that can determine these times (abstract, C2, L55-60, C6, L47-68 and C7, L1-25).

It would have been obvious to one skilled in the art at the time of the invention to modify Hallenstal, such that various time stamps can be determined regarding the call, to provide means for the user/system to know when a caller called.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta  
8-19-04



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